

Form PTO-1449 SUPPLEMENTAL INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>			Docket Number (Optional) 0152.00427	Application Number 10/049.259		
			Applicant George R. Newkome		<i>RECEIVED JAN 14 2003 TECH CENTER 1600 2000</i>	
			Filing Date 4/23/02	Group Art Unit 1625		
U.S. PATENT DOCUMENTS						
EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
FOREIGN PATENT DOCUMENTS						
	DOCKET NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES NO
OTHER DOCUMENTS (Including Author, Title, Date Pertinent Pages, Etc.)						
<i>MJ</i>	Newkome, G.R. et al., "α-Methyl Functionalization of Electron-Poor Heterocycles: Free Radical Chlorination." <i>Synthesis</i> , 676-679 (1984).					
<i>MJ</i>	Xu, Z. et al., "Stiff Dendritic Macromolecules: Extending Small Molecule Organic Chemistry to the Nanoscale Regime." <i>Polym. Prep.</i> , 34, 128-129 (1993).					
<i>MJ</i>	Xu, Z. et al., "Synthesis and Characterization of a High Molecular Weight Stiff Dendrimer," <i>Angew. Chem. Int. Ed. Engl.</i> , 32(2), 246-248 (1993).					
<i>MJ</i>	Xu, Z. et al., "Stiff Dendritic Macromolecules Based on Phenylacetylenes." In <i>Advances in Dendritic Macromolecules</i> , Chapter 2, 69-104 (1994).					
<i>MJ</i>	Markovitsi, D. et al., "Laser Induced Triplet Excitons in the Columnar Phases of an Octasubstituted Metal Free Phthalocyanine." <i>J. Am. Chem. Soc.</i> , 110, 2001-2002 (1988).					
<i>MJ</i>	Kopelman, R. et al., "Spectroscopic Evidence for Excitonic Localization in Fractal Antenna Supermolecules." <i>Phys. Rev. Lett.</i> , 78(7), 1239-1242 (1997).					
<i>MJ</i>	Shortreed, M.R. et al., "Directed Energy Transfer Funnels in Dendrimeric Antenna Supermolecules." <i>J. of Phys. Chem. B.</i> , 101, 6318-6322 (1997).					
<i>MJ</i>	Xu, Z. et al., "Design and synthesis of a convergent and directional molecular antenna." <i>Acta Polym.</i> , 45, 83-87 (1994).					
<i>MJ</i>	Luryi, S. et al., "Future Trends in Microelectronics: The Road Ahead." <i>Science</i> , 283, (1999).					
<i>MJ</i>	Pendler, J.H. et al., "Catalysis in Micellar and Macromolecular Systems." <i>Academic Press</i> (1975).					
<i>MJ</i>	Newkome, George R. et al., "Chemistry within a Unimolecular Micelle Precursor: Boron Superclusters by Site- and Depth-Specific Transformations of Dendrimers." <i>Angew. Chem. Int. Ed. Engl.</i> , 33, No. 6 (1994). <i>pp 666-668</i>					
<i>MJ</i>	Newkome, George R. et al., "Cascade Infrastructure Modification via Integration of Application-Based Monomers." <i>Polym Mater Sci Eng</i> , 73, 223-223 (1995).					
<i>MJ</i>	Newkome, George R. et al., "Design, Syntheses, Complexation, and Electrochemistry of Polynuclear Metallocendrimers Possessing Internal Metal Binding Loci." <i>Chem. Eur. J.</i> , 5(5), 1445-1451 (1999).					
<i>MJ</i>	Newkome, George R. et al., "Construction of Dendritic Assemblies: A Tailored Approach to Isomeric Metallomacromolecules by Means of Bis(2,2'-6'-2'-terpyridine)ruthenium(II) Connectivity." <i>Macromolecules</i> , 31, 4382-4386 (1998).					
<i>MJ</i>	Zhao, Mingqi. et al., "Dendrimer-Encapsulated Pt Nanoparticles: Synthesis, Characterization, and Applications to Catalysis." <i>Adv. Mater.</i> , 11(3) (1999). <i>pp 217 - 220</i> .					
<i>MJ</i>	Chechik, Victor. et al., "Self-Assembled Inverted Micelles Prepared from a Dendrimer Template: Phase Transfer of Encapsulated Guests." <i>J. Am. Chem. Soc.</i> , 121, 4910-4911 (1999).					
<i>MJ</i>	Zhao, Mingqi. et al., "Homogeneous Hydrogenation Catalysis with Monodisperse, Dendrimer-Encapsulated Pd and Pt Nanoparticles." <i>Angew. Chem. Int. Ed.</i> , 38(3) (1999).					
<i>MJ</i>	Balogh, Lajos. et al., "Poly(Amidoamine) Dendrimer-Templated Nanocomposites. I. Synthesis of Zerovalent Copper Nanoclusters." <i>J. Am. Chem. Soc.</i> , 120, 7355-7356 (1998).					

P.2

<i>Mey</i>	Fan, Beek, N.C. et al., "A small angle scattering study of dendrimer - copper sulfide nanocomposites," <i>Polymer</i> , 40, 2537-2545 (1999).
<i>Mey</i>	Dagani, Ron, "Jewel-Studded Molecular Trees," <i>Science/Technology</i> 77(6), 33-36 (1999).
<i>Mey</i>	Kriesel, J.W. et al., "Dendrimers as Building Blocks for Nanostructured Materials: Micro - and Mesoporosity in Dendrimer-Based Xerogels," <i>Chem. Mater.</i> , 11, 1190-1193 (1999).
<i>Mey</i>	Tran Van, Francois. et al., Polyethyleneoxide-dihydrophenazine block copolymer as a cathode material for lithium-polymer batteries." <i>Electrochimica Acta</i> , Vol. 43, 2083-2087 (1998). <i>Abstract only.</i>
<i>Mey</i>	Steigerwald, M.L. et al., "Semiconductor Crystallites: A Class of Large Molecules," <i>Acc. Chem. Res.</i> , 23, 183-188 (1990).
<i>Mey</i>	Noglik, Horst. et al., "Surface Functionalization of Cadmium Sulfide Quantum Confined Semiconductor Nanoclusters. 2. Formation of a "Quantum Dot" Condensation Polymer," <i>Chem. Mater.</i> , 7, 1333-1336 (1995).
<i>Mey</i>	Wei-ming Que, et al., "Theory of collective excitations in a two-dimensional array of quantum dots," <i>Rapid Communications</i> , Vol. 38, No. 5 (1988). <i>PP. 3614-3617</i>
<i>Mey</i>	Weller, Horst, "Colloidal Semiconductor Q-Particles: Chemistry in the Transition Region Between Solid State and Molecules," <i>Agnew. Chem. Int. Ed. Engl.</i> , 32, 41-53 (1993).

EXAMINER <i>Mey</i>	DATE CONSIDERED 1/20/05
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EXAMINER: Initial if citation considered, whether or not citation is in conformance with MPEP § 609. Draw line through citation if not in conformance and not considered. Include copy of this form with next communication to the applicant.

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MANUAL OF PATENT EXAMINING PROCEDURE

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Sheet 1 of 2

Form PTO-1449 <i>TRADEMARK OFFICE</i>		Docket Number (Optional) 0152.00427	Application Number 10/049,259
INFORMATION DISCLOSURE CITATION IN AN APPLICATION <i>(Use several sheets if necessary)</i>		Applicant George R. Newkome	
		Filing Date 04/23/02	Group Art Unit 1625

U.S. PATENT DOCUMENTS

EXAMINER INITIAL	DOCUMENT NUMBER	DATE	NAME	CLASS	SUBCLASS	FILING DATE IF APPROPRIATE
<i>Mug</i>	5,154,853	1992	Newkome			
	5,886,126	1999	Newkome			<i>RECEIVED</i>
	5,886,127	1999	Newkome			<i>DEC 13 2002</i>
	5,773,551	1998	Newkome			<i>TECH CENTER 1600/2900</i>

FOREIGN PATENT DOCUMENTS

	DOCKET NUMBER	DATE	COUNTRY	CLASS	SUBCLASS	TRANSLATION
						YES
						NO

OTHER DOCUMENTS (Including Author, Title, Date Pertinent Pages, Etc.)

<i>Mug</i>	Buckman, A.F., et al., "Functionalization of Poly(ethylene glycol) and Monomethoxy-Poly(ethylene glycol)," <i>Makromol. Chem.</i> , 182, 1379-1384 (1981).
<i>Mug</i>	Burns, C.J., et al., "A convenient synthetic route to differentially functionalized long chain polyethylene glycols," <i>Synth. Commun.</i> , 29 (13), 2337-2347 (1999).
<i>Mug</i>	Cisak, et al., "L ₂ H High-energy Non-aqueous Batteries", <i>Horwood</i> (1993).
<i>Mug</i>	Dominguez, X.A., et al., "Simple Preparation of a Very Active Raney Nickel Catalyst," <i>J. Org. Chem.</i> , 26(5), 1625 (1961).
<i>Mug</i>	Hult, A. et al., "Hyperbranched Polymers," <i>Advances in Polymer Science: Branched Polymers</i> , Chapter 1, 2-34 (1999).
<i>Mug</i>	Issberner, J., et al., "Dendritic Bipyridine Ligands and Their Tris(Bipyridine)ruthenium(II) Chelates: Syntheses, Absorption Spectra, and Photophysical Properties," <i>Chem. Eur. J.</i> , 3(5), 706-712 (1997).
<i>Mug</i>	Lipkowski, J., "Electrochemistry of Novel Materials, Chapters 2 and 3 (1994)."
<i>Mug</i>	McMurry, J., "Ester Cleavages Via S _N 2-Type Dealkylation," <i>Organic Reactions</i> , Chap. 2, 187-224 (1976).
<i>Mug</i>	Narayanan, V.V., et al., "Novel Dendrimers Possessing Internal Electroactive Quinoid Moieties," <i>Polym. Prep.</i> , 37(2), 419-420 (1996).
<i>Mug</i>	Newkome et al., "Dendrimers and Dendrons Concepts, Synthesis, Applications; VCH Weinheim, Germany, 2001.
<i>Mug</i>	Newkome, G.R. et al., "Synthesis of 1 → 3 Branched Isocyanate Monomers for Dendritic Construction," <i>Designed Monomers and Polymers</i> , I(1) 3-14 (1998) (1998).
<i>Mug</i>	Newkome, G.R., "Nanometric dendritic macromolecules: stepwise assembly by double (2,2'-6',2"-bipyridine)ruthenium(II) connectivity," <i>J. Mater. Chem.</i> , 7(7), 1237-1244 (1997).
<i>Mug</i>	Newkome, G.R., et al., "Isocyanato-Based Dendritic Building Blocks: Combinatorial Tier Construction and Macromolecular Property Modification: <i>Angew. Chem.</i> , 37, 307-310 (1998).
<i>Mug</i>	Newkome, G.R., et al., "Synthesis and Chemistry of Novel Dendritic Macromolecules Possessing Internal Electroactive Anthraquinonoid Moieties," <i>Macromolecules</i> , 30(17), 5187-5191 (1997).
<i>Mug</i>	Newkome, G.R., et al., "A Tailored Approach to the Synthesis of Electroactive Dendrimers Based on Diaminoanthraquinones," <i>Macromolecules</i> 1999, 32, 6782-6791.
<i>Mug</i>	Newkome, G.R., et al., "A useful dendritic building block:di-tert-butyl 4-[2-tert-butoxycarbonyl]ethyl]-4-isocyanato-1,7-heptanedicarboxylate." <i>Tetrahedron Lett.</i> 38(40), 7053-7056 (1997).
	Newkome, G.R., et al., "Alkane Cascade Polymers Possessing Micellar Topology: Micellanoic Acid Derivatives," <i>Chem. Int. Ed. Engl.</i> , 30(9), 1176-1178 (1991).
	Newkome, G.R., et al., "Anthraquinoid-based Extended Dendritic Monomers: Electrochemical Comparisons," <i>Designed Monomers and Polymers</i> 2000, 3, 1, 17-26.
	Newkome, G.R., et al., "Cascade Molecules. 15. Synthesis of Tris(3-substituted) Tripropylnitromethanes," <i>Synthesis</i> , (10), 839-841 (1991).

<i>mrg</i>	Newkome, G.R., et al., "Dendrimer Construction and Macromolecular Property Modification via Combinatorial Methods," <i>Biochem. and Bioeng. (Combinatorial Chemistry)</i> , 1999, 61(4), 243-253.
	Newkome, G.R., et al., "Electroactive Metallomacromolecules via Tetrabis(2,2':6'm2"-Terpyridine)ruthenium(II) Complexes: Dendritic Networks towards Constitutional Isomers and Neutral Species without External Counterions," <i>J. AM. Chem. Soc.</i> 2000, 122, 9993-10006.
	Newkome, G.R., et al., "Neutral highly branched metallomacromolecules: Incorporation of (2,2':6'2"-terpyridine)ruthenium(II) complex without external counterions," <i>Chem. Commun.</i> , 27-28 (1999).
	Newkome, G.R., et al., "Synthesis of Amine Building Blocks for Dendritic Macromolecule Construction," <i>Synlett</i> , (1), 53-54 (1992).
	Newkome, G.R., et al., "Synthesis of Unsymmetrical 5,5'-Disubstituted 2,2'-Bipyridines," <i>J. Org. Chem.</i> , 62(9), 3013-3014 (1997).
	Newkome, G.R., et al., "Unimolecular micelles," <i>Angew. Chem. Int. Ed. Engl.</i> , 30(9), 1178-1180 (1991).
	Owen, J.R., "Rechargeable lithium batteries," <i>Chem. Soc. Rev.</i> , 26, 259-267 (1997).
<i>c</i>	Roovers, J., et al., "Dendrimers and Dendrimer-Polymer Hybrids," <i>Advanced in Polymer Science: Branched Polymers</i> , 180-228 (1999).
<i>mrg</i>	Salomon, M., "Solubility problems relating to lithium battery electrolytes," <i>Pure Appl. Chem.</i> , 70(10), 1905-1912 (1998).
<i>mrg</i>	Tor, Y., et al., "Biomimetic Ferric Ion Carriers. A Chiral Analogue of Enterobactin," <i>J. Am. Chem. Soc.</i> , 1987, 109, 21, 6517-6518.
	Weis, C.D., et al., "Reduction of Nitro Substituted Tertiary Alkanes," <i>Synthesis</i> , (9), 1053-1065 (1995).
	Young, J.K., et al., "Smart" Cascade Polymers, Modular Synthesis of Four-Directional Dendritic Macromolecules with Acidic, Neutral, or Basic Terminal Groups and the Effect of pH Changes on Their Hydrodynamic Radii," <i>Macromolecules</i> , 27(13), 3464-3471 (1994).
<i>mrg</i>	Zhang, J., et al., "Geometrically-controlled and site-specifically-functionalized phenylacetylene macrocycles," <i>J. Am. Chem. Soc.</i> , 116(10), 4227-4239 (1994).
<i>mrg</i>	Zhang, J., et al., "Nanoarchitectures. 1. Controlled synthesis of phenylacetylene sequences," <i>J. Am. Chem. Soc.</i> , 114(6), 2273-2274 (1992).
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<input checked="" type="checkbox"/>	Barnes, William L., et al., "Reflections on Polymers," <i>Science</i> , 285(5427), p. 1442-5.
<input checked="" type="checkbox"/>	Krumanacker, M., et al., "Prospects in Nanotechnology: Toward Molecular Manufacturing," J. Eds., Wiley, New York (1995).
<input checked="" type="checkbox"/>	Gilbert, Richard D., et al. "Advances in the Applications of Membrane-Mimetic Chemistry."
<input checked="" type="checkbox"/>	

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